

We claim:

1. A method to aid in diagnosing glioblastoma, comprising the steps of:
 - detecting an expression product of at least one gene in a first brain tissue sample suspected of being neoplastic wherein said at least one gene is selected from the group consisting of ABCC3, GPNMB, NNMT, and SEC61 γ ; and
 - comparing expression of the at least one gene in the first tissue sample with expression of the at least one gene in a second brain tissue sample which is normal, wherein increased expression of the at least one gene in the first tissue sample relative to the second tissue sample identifies the first tissue sample as likely to be neoplastic.
2. The method of claim 1 wherein the expression of the at least one gene in the first tissue sample relative to the second tissue sample is at least 2 fold higher.
3. The method of claim 1 wherein the expression of the at least one gene in the first tissue sample relative to the second tissue sample is at least 5 fold higher.
4. The method of claim 1 wherein the expression of the at least one gene in the first tissue sample relative to the second tissue sample is at least 10 fold higher.
5. The method of claim 1 wherein the expression product is RNA.
6. The method of claim 1 wherein the expression product is protein.

7. The method of claim 1 wherein the first and second tissue samples are from a human.
8. The method of claim 1 wherein the first and second tissue samples are from the same human.
9. The method of claim 1 wherein the at least one gene is ABCC3.
10. The method of claim 1 wherein the at least one gene is GPNMB.
11. The method of claim 1 wherein the at least one gene is NNMT.
12. The method of claim 1 wherein the at least one gene is SEC61 γ .
13. A method of specifically delivering a reagent to a glioblastoma, comprising the step of:
 - contacting cells of the glioblastoma an antibody which is conjugated to a reagent, wherein the antibody specifically binds to an extracellular epitope of ABCC3 or GPNMB, whereby the reagent is delivered to the cell.
14. The method of claim 13 wherein the antibody is ABCC3-specific.
15. The method of claim 13 wherein the antibody is GPNMB-specific.
16. The method of claim 13 wherein the glioblastoma is multidrug-sensitive.
17. The method of claim 13 wherein the antibody is GPNMB-specific and the glioblastoma is multidrug-resistant.
18. The method of claim 13 wherein the reagent is a chemotherapeutic agent.
19. The method of claim 13 wherein the reagent is a cytotoxin.
20. The method of claim 13 wherein the reagent is a non-radioactive label.
21. The method of claim 13 wherein the reagent is a radioactive compound.
22. The method of claim 13 wherein the glioblastoma is in a human.

23. A method of treating a human with a glioblastoma, comprising the step of:

contacting isolated dendritic cells of the human with an isolated and purified polynucleotide sequence of at least one gene selected from the group consisting of ABCC3, GPNMB, NNMT, and SEC61 γ ; and administering said isolated dendritic cells to the human.

24. The method of claim 15 wherein the polynucleotide is RNA.

25. The method of claim 15 wherein the administration to the patient is intraperitoneal.

26. The method of claim 15 wherein the at least one gene is ABCC3.

27. The method of claim 15 wherein the at least one gene is GPNMB.

28. The method of claim 15 wherein the at least one gene is NNMT.

29. The method of claim 15 wherein the at least one gene is SEC61 γ .

30. A method of identifying a test compound as a potential anti-cancer drug, comprising the step of:

contacting a test compound with a cell which expresses at least one gene selected from the group consisting of ABCC3, GPNMB, NNMT, and SEC61 γ ;

monitoring an expression product of the at least one gene; and

identifying the test compound as a potential anti-cancer drug if it

decreases the expression of the at least one gene.

31. The method of claim 30 wherein the cell is a human cell.

32. The method of claim 30 wherein the cell is a glioblastoma cell.

33. The method of claim 30 wherein the cell is a human glioblastoma cell.

34. The method of claim 30 wherein the expression product is RNA.
35. The method of claim 30 wherein the expression product is protein.
36. The method of claim 30 wherein the at least one gene is ABCC3.
37. The method of claim 30 wherein the at least one gene is GPNMB.
38. The method of claim 30 wherein the at least one gene is NNMT.
39. The method of claim 30 wherein the at least one gene is SEC61 γ .
40. The method of claim 30 wherein the cell overexpresses the at least one gene relative to a normal cell of the same tissue.
41. The method of claim 30 wherein expression of at least two of said genes is monitored.
42. The method of claim 36 wherein expression of at least three of said genes is monitored.
43. The method of claim 36 wherein expression of at least four of said genes is monitored.
44. The method of claim 30 wherein the decrease in expression is at least 2 fold.
45. The method of claim 30 wherein the decrease in expression is at least 5 fold.
46. The method of claim 30 wherein the decrease in expression is at least 10 fold.
47. The method of claim 30 wherein the test compound is identified as an anti-glioblastoma drug.